



San Manuel 2015-2016 ISEEK Student Workers Engagement and Course Success

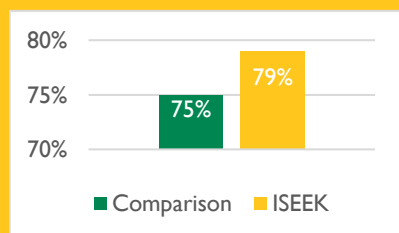
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Purpose of Brief

The purpose of this brief is to examine the relationship between 2015-2016 Crafton Hills College students who participated in the San Manuel ISEEK student worker program with student engagement and course success.

Summary of Findings

- San Manuel ISEEK students were more likely to successfully complete their courses (79%) than students in the same section (75%)



- ISEEK male, 30-34 year olds, and Hispanic Students were statistically significantly and substantially more likely to successfully complete their courses than students in the comparison group**
- ISEEK students were more likely to be engaged in the following areas at the end of the semester:
 - Study longer
 - Had more conversations with professors outside of class

Overview

In 2015 – 2016 sixty-two Crafton Hills College Students participated in the San Manuel Increasing Student Engagement, Employment, and Knowledge (ISEEK) Student Worker Program. This brief examines how well on-campus Crafton Hills College student employment increased student engagement and student course success rates for the students employed under the project.

Methodology

In 2015-2016 fifty-five students participated in the San Manuel ISEEK Student Worker program. Students participating in the San Manuel ISEEK Student Worker program were compared on course success to students who earned a grade on record (GOR) in the same section. Course success refers to earning a grade of A, B, C, or P and a GOR is a grade of A, B, C, D, F, I, P, NP, or W.

In addition to course success, students were also administered a student engagement survey that was developed by Crafton's Educational Master Planning Committee (EMPC). Thirty-five ISEEK students completed the student engagement survey prior to participating in the ISEEK program and 20 completed the student engagement survey after participating in the ISEEK program. The pre-post student engagement survey compared students on 11 Likert scaled questions where strongly disagree = 1, disagree = 2, agree = 3, and strongly agree = 4. Students were also asked how often they planned to study, have conversations with their professors, and the number of campus events they planned to attend. On the post-engagement survey students were asked how many hours they actually studied a week, how many actual conversations they had with their professors, and the number of campus events they attended. They were also asked two open ended questions that asked what the student could have done differently to improve their academic performance and what the ISEEK program could do to help the student have a more successful college experience.

The effect size statistic was used to indicate the size of the difference on student success between ISEEK Student Workers and students who earned a grade on record in the section. One method of interpreting effect size was developed by Jacob Cohen. Jacob Cohen defined "small," "medium," and "large" effect sizes. He explained that an effect size of .20 can be considered small, an effect size of .50 can be considered medium, and an effect size of .80 can be considered large. Research in the social sciences has indicated that a substantial effect is considered meaningful if the effect size is .10 or higher. It is important to mention that the number of students in each group does not influence Effect Size; whereas, when statistical significance is calculated, the number of students in each group does influence the significance level (i.e. "p" value being lower than .05).

Limitations

A limitation to the study was the timing of when ISEEK workers could start working. For instance, most of the San Manuel ISEEK Student Workers were not approved to work until well after the semester started. This may have added additional stress and challenges for ISEEK students that might negatively impact their performance in their courses.

Another limitation to the study was the pre-engagement survey. Students taking the pre-engagement survey were asked to answer questions based on their plans for the year. This was a limitation because students often have high expectations and hopes for the year that they may not be able to attain.

Findings

Table 1 illustrates the course success rate for ISEEK students and students who earned a GOR in the same section, referred to as the comparison group. ISEEK students were more likely to complete their courses with a “C” grade or better (79%) than students enrolled in the same section (75%). The difference was very close to being statistically significant ($p = .054$) and also very close to being meaningful ($ES = .09$). ISEEK males were statistically significantly and substantially more likely to successfully complete their course (86%) than males in the comparison group (74%). In addition, ISEEK students who were 30 – 34 years old, Hispanic, and Multiple Races were also statistically significantly and substantially more likely to successfully complete their course than students in the comparison group.

Table 1: 2015-2016 Course Success Rate Comparison between San Manuel ISEEK Student Workers and Students Enrolled in the Same Section by Gender, Age, and Ethnicity.

Demographics	Comparison Group			San Manuel Student Workers			Substantially Different*	Statistical Significant**
	#	N	%	#	N	%		
Gender								
Female	3,679	4,855	75.8	222	292	76.0	No	No
Male	2,947	3,983	74.0	101	117	86.3	Yes	Yes
Unknown	15	19	78.9					
Total	6,641	8,857	75.0	323	409	79.0	No	No
Age								
19 or Younger	2,308	3,158	73.1	44	70	62.9	-Yes	No
20-24 Years Old	2,763	3,652	75.7	117	147	79.6	No	No
25-29 Years Old	778	1,032	75.4	85	104	81.7	Yes	No
30-34 Years Old	386	495	78.0	34	38	89.5	Yes	Yes
35-39 Years Old	159	202	78.7	26	30	86.7	Yes	No
40-49 Years Old	173	221	78.3	17	20	85.0	Yes	No
50 or Older	74	97	76.3					
Total	6,641	8,857	75.0	323	409	79.0	No	No
Ethnicity								
African American	233	365	63.8	8	15	53.3	-Yes	No
Asian	355	444	80.0	19	29	65.5	-Yes	No
Caucasian	2,559	3,244	78.9	82	96	85.4	Yes	No
Hispanic	3,042	4,206	72.3	194	247	78.5	Yes	Yes
Multiple Races	408	537	76.0	20	22	90.9	Yes	Yes
Native American	19	28	67.9					
Unknown	25	33	75.8					
Total	6,641	8,857	75.0	323	409	79.0	No	No

*“Yes” refers to a meaningful or substantial effect size difference if the effect size is .10 or higher. “No” refers to an effect size difference that is below .10. A “-Yes” indicates that the comparison group had a higher course success rate than the San Manuel Student Workers and that the difference was substantial.

**“Yes” refers to a p-value that is less than .05 and indicates that the difference in course success is a result of chance only 5 out of 100 times. “No” refers to p-value that is .05 or higher.

Table 2 on the following page illustrates the change in ISEEK student responses on the student engagement survey prior to participating in the ISEEK program and after the program. There were no changes in student engagement in two areas, 5) consistently asking questions or participating in class, and 8) developing meaningful relationships with other Crafton students. Conversely, there were two other student engagement areas that statistically significantly and substantially declined after participating in ISEEK which may be a result of students having high expectations at the start of the year. ISEEK Students were statistically significantly and substantially less likely to 7) consistently participate in a CHC club, and 10) work hard to meet their instructor's expectations.

Table 2: Pre-post Student Engagement Averages, Statistical Significance, and Effect Sizes.

Pair	Question	Mean	N	SD	Substantially Different*	Statistically Significant**
1	q7a: I plan to complete all required course assignments.	3.75	16	.775	-Yes	No
	q7a_post: I completed all required course assignments.	3.50	16	.632		
2	q7b: I plan to attend every class session.	3.75	16	.775	-Yes	No
	q7b_post: I attended every class session.	3.50	16	.516		
3	q7c: I plan to come to every class prepared (readings and assignments completed).	3.75	16	.775	-Yes	No
	q7c_post: I came to every class prepared (readings and assignments completed).	3.63	16	.500		
4	q7d: I plan to keep my course materials, assignments and notes highly organized.	3.75	16	.775	-Yes	No
	q7d_post: I kept my course materials, assignments and notes highly organized.	3.63	16	.500		
5	q7e: I plan to consistently ask questions or participate in class.	3.57	14	.646	No	No
	q7e_post: I consistently asked questions or participated in class.	3.57	14	.514		
6	q7f: I plan to consistently work with classmates outside of class.	3.25	16	.856	-Yes	No
	q7f_post: I consistently worked with classmates outside of class.	2.88	16	.957		
7	q7g: I plan to consistently participate in a CHC related club or organization.	2.94	16	.772	-Yes	Yes
	q7g_post: I consistently participated in a CHC related club or organization.	2.50	16	.966		
8	q7h: I plan to develop meaningful relationships with other CHC students.	3.56	16	.814	No	No
	q7h_post: I developed meaningful relationships with other CHC students.	3.56	16	.629		
9	q7i: I plan to be friendly and supportive of other students.	3.81	16	.750	-Yes	No
	q7i_post: I was friendly and supportive of other students.	3.75	16	.447		
10	q7j: I plan to work hard to meet my instructor's expectations.	3.75	16	.775	-Yes	Yes
	q7j_post: I worked harder than I thought to meet an instructor's expectations.	3.25	16	.775		
11	q7k: I plan to push myself as hard as I need to be successful in my courses.	3.75	16	.775	-Yes	No
	q7k_post: I could have pushed myself harder.	3.25	16	.856		

*"Yes" refers to a meaningful or substantial effect size difference if the effect size is .10 or higher. "No" refers to an effect size difference that is below .10. A "-Yes" indicates that the comparison group had a higher mean average than the San Manuel Student Workers and that the difference was substantial.

**"Yes" refers to a p-value that is less than .05 and indicates that the difference in course success is a result of chance only 5 out of 100 times. "No" refers to p-value that is .05 or higher.

Referring to Table 3, students were more likely to study longer and had more conversations with professors outside of class. However, students were less likely to attend campus events.

Table 3: Pre-Post responses to hours studied, conversations with professors outside of class, and attendance to campus events.

Question	Pre-Assessment: On average, I plan to study ___ hours per week outside of class		Post-Assessment: On average, I studied ___ hours per week outside of class.	
	#	%	#	%
Study Hours				
0-2 hours	1	2.9	0	0.0
3-5 hours	11	31.4	6	30.0
6-10 hours	9	25.7	4	20.0
11-15 hours	8	22.9	4	20.0
16-20 hours	4	11.4	4	20.0
More than 20 hours	2	5.7	2	10.0
Total	35	100.0	20	100.0
	Pre-Assessment: Approximately, I plan to have ___ conversations with professors outside of class.		Post-Assessment: Approximately, I had ___ conversations with professors outside of class.	
# of Conversations	#	%	#	%
0	3	8.6	0	0.0
1-2	8	22.9	4	20.0
3-4	10	28.6	5	25.0
5-10	9	25.7	6	30.0
11-15	3	8.6	0	0.0
16 or more	2	5.7	5	25.0
Total	35	100.0	20	100.0
	Pre-Assessment: Approximately, I plan to attend ___ campus events or activities.		Post-Assessment: Approximately, I attended ___ campus events or activities.	
# of Campus Events	#	%	#	%
0	2	5.7	4	20.0
1-2	11	31.4	8	40.0
3-4	13	37.1	4	20.0
5-6	3	8.6	0	0.0
6 or more	6	17.1	3	15.0
Total	35	100.0	19	95.0

Table 4 shows the open-ended responses ISEEK students provided to the following question on the post-engagement survey: If you had the semester to do over again, what would you do differently to improve your academic performance? ISEEK students were most likely to identify time management and their approach to studying as strategies for improving their academic performance. As an illustration, one student stated that they would “talk to other students more ... [and] ask more questions.” Another student stated that they “...could have studied a little more, and participated in more class questions.”

Table 4: Open-Ended Responses to the following Question on the Post-Engagement Survey: If you had the semester to do over again, what would you do differently to improve your academic performance?

Time Management and Organization
Dedicate more time to passing.
If I had to retake this semester over the one thing I would change is change my class time. Having it late at night makes it more difficult to spend the amount of time I would truly want to spend on my academics.
Keep a planner to schedule everything.
Not procrastinate big assignments.
Taken a later class. I suffered from morning sickness due to my pregnancy and it was difficult to get to class so early in the morning.
Approach to Studying
I probably could have studied a little more, and participated in more class questions
I would have dedicated more time on campus studying and taking advantage of the quietness that exists in the library.
I would spend more time on comprehending course material on a deeper level (for myself) than what was required to pass tests in class (for school).
Talk to other students more. Ask more questions.
Tutoring
Get more help outside of class. (tutoring center)
I would have requested a tutor earlier in the semester.
I would seek tutoring for a few classes that I was struggling with.
Study Group
I would have participated in more study groups. Explaining the information to others could have helped me to remember the information faster.
Miscellaneous
If I had to do this semester over again I would of probably taken another class because I have received all A's this semester so far.
Not miss any classes

Table 5 shows the open-ended responses ISEEK students provided to the following question on the post-engagement survey: What can we (CHC) do to help you have a more successful college experience? ISEEK students were most likely to state that they did not need anything to be more successful, and input into how instructors taught classes. As an illustration, one student stated that “I believe all the tutoring and computer centers have helped enough.”

Table 5: Open-Ended Responses to the following Question on the Post-Engagement Survey: What can we (CHC) do to help you have a more successful college experience?

Nothing
I believe all the tutoring and computer centers have helped enough.
I successfully completed my courses at Crafton and attained my Associates of Arts' degrees. Thank you.
I think CHC has a lot of great services available to students. I have truly enjoyed my college experience at CHC. I only wish that we had more student parking, but I'm sure that will improve once the on-campus construction is completed.
You all are doing an awesome job!
Classes
I think it would be beneficial to take the students opinions of professors into account. After all, they do know best about what teachers do well and which do not mesh that well with students or curriculums.
Maybe encourage group activities more in class when applicable. Not only this, but also informing students on how to most effectively work in groups to their specific skill set or personality type. It would encourage teamwork and social networking while also preparing students for a work environment.
Not cover too much material in one class sitting.
There isn't much that I could suggest. However, I would suggest having a class survey for every instructor because I think the department should look more into how the students feel about their instructor's performance. It could help the instructors improve their teaching techniques. By doing this, it could greatly improve the students learning techniques.
Tutoring Center
Hire experienced tutors who can actually teach and not rude arrogant students who are make other students feel inferior.
Parking
More parking or on campus tram, so students can get to next class quickly.
Miscellaneous
Perhaps have counseling be more efficient i have heard many bad experiences with the counseling office.